

REMARKS

Claims 1, 4, 8 and 10 are currently amended. Claim 2 has been cancelled. Claims 1 and 3-14 remain pending in this application.

Claims 1-3, 8 and 9 are rejected under 35 U.S.C. § 102 as being anticipated by Yokoi et al. The rejection is respectfully traversed.

The present invention and Yokoi et al. are similar in that the leading pulse is made wide, but the present invention is characterized in that the predetermined size N is set with reference to a reference size which is a sum of a beam spot diameter of the light beam and a distance traveled by the light beam within a time amounting to a sum of rising and falling time constants of a light beam power, and that this predetermined size N is set to 0.55 times $\pm 10\%$ of the reference size. This feature is not taught or suggested in Yokoi et al.

The present invention takes into consideration the beam spot diameter of the light beam and the distance traveled by the light beam within the time amounting to the sum of the rising and falling time constants of the light beam power, which are important factors to be considered during high-speed recording. However, Yokoi et al. does not take into consideration such beam spot diameter and distance traveled by the light beam.

According to Yokoi et al., the recording speed is such that the clock frequency is approximately 4.3 MHz at the maximum. Under such a recording speed, the rising and falling time constants of the light beam power (recording pulses), which must be taken into consideration for the high-speed recording such as that of the present invention, do not need to be taken into consideration. It should be noted that the object of Yokoi et al. is to suppress the distortion of the recording mark formed by the single

recording pulse. Accordingly, it is not true that the present invention (original claim 2) is met by Yokoi et al.

The present invention takes into consideration the recording speed that is 10-times speed of the DVD, for example, and thus, the clock frequency is approximately 260 MHz or higher. The present invention defines the "reference" that becomes necessary in such a high-speed recording region where the rising and falling time constants of the light beam power (recording pulses) can no longer be neglected. This reference is the predetermined size N of the recording mark formed by the recording pulse, and a plurality of recording pulses are used when forming the recording mark having a size greater than the predetermined size N .

Yokoi et al. does not teach or suggest the "reference" described above, particularly since the recording speeds being considered are completely different between the present invention and Yokoi et al. Further, Yokoi et al. does not teach or suggest how the recording pulses should be irradiated to form the recording marks (that is, a recording strategy) for the high-speed recording (for example, 10-times speed of the DVD) in order to obtain a sufficiently high power and to realize satisfactory recording characteristics such as modulation factor and jitter (see page 7, lines 1-11 of the specification). Consequently, the rejection of claim 1 as amended should be withdrawn. Claims 3-7 depend from claim 1, and should be allowable along with claim 1 and for other reasons.

Claim 8, similarly to claim 1, recites "a light beam formed by a single recording pulse when forming a recording mark having a size less than or equal to a predetermined size N " and "a light beam formed by a plurality of recording pulses when forming a recording mark having a size greater than the predetermined size N ." According to claim 8, the "predetermined size N " is "set with reference to a reference

a light beam power." Claims 9-14 depend from claim 8, and should be allowable along with claim 8 and for other reasons.

The allowance of claims 4-7 and 10-14 is gratefully acknowledged. In view of the above remarks, applicant believes the pending application, with claims 1-14, should be in condition for allowance.

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